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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/554,708	07/31/2000	DANIEL M. GINOSAR	LIT-PI-099	5703

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EXAMINER
MEDLEY, MARGARET B

ART UNIT	PAPER NUMBER
1714	

DATE MAILED: 05/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

	09/554,708	GINOSAR ET AL.	
Office Action Summary	**Examiner**	**Art Unit**	
	Margaret B. Medley	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 February 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *16-23,25 and 27-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *16-23,25 and 27-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *17* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

The action is in response to Paper No. 17 dated February 27, 2003. Applicants' requested amendment to the specification at page 10 line 13 through page 11, line 6 has been entered of record. However the requested amendment appears on page 8, line 5-20 of the PCT/US 99/16669. Claims 24 and 26 have been cancelled. The amendments to claims 16, 28, 29 and 30 have been entered of record. The pending claims of record are claims 16-23, 25 and 27-30.

The examiner acknowledges applicants' reference to the fact that the "See Attachment" indicated on page 1 of the PTO-1449 Paper No. 14 dated February 11, 2003 refers to the pages 2-5 of the PTO 1449. The examiner will initial the second copy of the February 11, 2002, PTO-1449, that is Paper No. 17 dated February 27, 2003 making the missing references (AS, AT, AV, AW of sheet 2, and CK, CL and CM of sheet 5) of record.

The objection to the specification is withdrawn in view of applicants' amendment to the specification.

In view of applicants' amendment to claim 29 the 35 USC 112, second paragraph rejection is withdrawn.

In view of applicants' arguments set forth on pages 8 and 9 of Paper No. 17, the 35 USC 112 second paragraph rejection of claims 27-28 are withdrawn.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 30 remains rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The last paragraph of the said claim for "producing a final product comprising an alkyl ester and glycerol, wherein the glycerol is separated from the alkyl ester by controlling the temperature and pressure of the reaction conditions" is considered as new matter.

The said limitation is considered as new matter because it appears to be in conflict with the specification that states **"additionally, the solubility of the reaction products such as alkyl esters in the critical fluid can be controlled by controlling the reactor's temperature and pressure. Where a reaction product's solubility is low or nonexistent such as glycerol, it drops out of the fluid as it is created, thereby driving the reaction equilibrium toward product production which significantly reduces the quantity of excess reactants such as alcohol needed to drive the reaction to completion, note page 3, lines 11-16 of PCT '669, application or page 4, lines 6-11 of applicants' representative copy."**

The examiner has taken the position on record that the said limitation for controlling the reactor's temperature and pressure refers to the solubility of the reaction products of the alkyl esters in the critical fluid. The glycerol has a low or nonexistent solubility and drops out of the fluid as it is created. Therefore, the controlling does not appears to make reference to the glycerol as stated in claim 30. Thus the new matter rejection appears to be proper.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 29-30 remain for reasons made of record in Paper No. 18 dated November 29, 20902 rejected under 35 U.S.C. 102(b) as being clearly anticipated by Vieville et al (Vieville).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 16-23, 25, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vieville et al (Vieville) as applied to claims 29-30 above, and further in view of McDaniel et al (McDaniel) for reasons made of record in Paper No. 16 dated November 29, 2002.

Applicant's arguments filed February 27, 2003 have been fully considered but they are not persuasive.

In view of applicants' amendment to claim 16 and cancellation of claim 26 the 102(b) rejection over claims 16-17, 20-23 and 26-27 is withdrawn.

Applicants argue that Vieville fails to meet each an every element of claim 29 for the same reasons that claim 16 fails to meet the said element. A careful study of claim 16 that has been cancelled and pending claim 29 reveals that the claims are not of the scope. The examiner takes the position that the reaction of Vieville is conducted at room temperature, (room temperature is normally held to be 25^0C), that falls within the instant claimed 20^0C-200^0C range, at normal atmosphere, (normally held to be 760 psig), that falls within the instant claimed from about 150 psig to about 4000 psig and the use of CO_2 that is a critical fluid that the reaction temperature would inherently fall within about 20% of a critical temperature of the critical fluid medium and a reaction pressure is within about 0.5 to about 15 times a critical pressure of the critical fluid medium as modified by a co-solvent, methanol. The reaction product produced by the oleic acid, (acylglycerols) and methanol (C_1-C_4 short chain alcohols) in CO_2 (critical fluid) in the present of a catalyst meets each and every element and anticipates the instant claims. During the reaction glycerol is inherently produced and drops out of the reaction mixture. Thus the 102(b) rejection is maintained as being proper.

Applicants' arguments with respect to the controlling step of claim 30 is not proper because the said limitation is considered as new matter for the same reasons made of record supra and are not repeated herein. The controlling step set forth in the specification makes reference to controlling with respect to the solubility of reaction product alkyl ester in the critical

fluid. Vieville meets each and every elements of claim 30 for the same reasons and rebuttal made of record with respect to claim 29 that have been made of record supra. Thus the 102(b) rejection is maintained as being proper.

Applicants' argues that McDaniel does not provides the motivation to the artisan in the art to use a liquid catalyst to etherify a glycerin, to control the temperature of the reaction to separate the alkyl ester from the critical fluid and to use a recycle step for the critical fluid. The examiner maintains the position that claims 18-19 with respect to issue one, claim 28 and newly amended claim 16 (and 17, 20-23 and 27) with respect to issue two, and claim 25 with respect to issue three are properly rejected over McDaniel for reasons made of record in Paper No. 16 date November 29, 2002. Thus the 103 rejection over Vieville in view of McDaniel is proper.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret B. Medley whose telephone number is (703) 308-2518. The examiner can normally be reached on Monday--Friday from 7:30 a.m. to 6:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (703) 306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

M.B. Medley/dh
May 21, 2003

Margaret B. Medley
MARGARET MEDLEY
PRIMARY EXAMINER